

CLAIM AMENDMENTS:

This listing of claims will replace all prior versions and listings of claims in the application: Claims 1-20 (Cancelled)

21. (Currently amended) A method for inducing chondrogenesis, said method comprising administering to a patient an effective amount of a composition comprising autologous non-tissue culture expanded CD105+ cells isolated from the patient's bone marrow and a suitable matrix carrier.

22. (Cancelled)

23. (Previously presented) The method of claim 21 further comprising administering a protein selected from the Transforming Growth Factor-Beta (TGF- β) superfamily of proteins, wherein the protein is capable of inducing the formation of cartilage tissue.

24. (Previously presented) The method of claim 23 wherein said protein is a bone morphogenetic protein (BMP).

25. (Previously presented) The method of claim 24 wherein the BMP is BMP-2 or BMP-9.

26. (Currently amended) A method for treating arthritis, said method comprising administering to a patient an effective amount of a composition comprising autologous non-tissue culture expanded CD105+ cells isolated from the patient's bone marrow and a suitable matrix carrier.

27. (Currently amended) A method for treating articular cartilage defects or damage, said method comprising administering to a patient an effective amount of a composition comprising autologous non-tissue culture expanded CD105+ cells isolated from the patient's bone marrow and a suitable matrix carrier.

28. (Currently amended) A method for repairing cartilage tissue said method comprising administering to a patient an effective amount of a composition comprising autologous non-tissue culture expanded CD105+ cells isolated from the patient's bone marrow, a suitable matrix carrier, and a protein selected from the TGF- β superfamily of proteins, wherein the protein is capable of inducing the formation of cartilage tissue.

29. (Previously presented) The method of claim 28 wherein said protein is a BMP.

30. (Cancelled)

31. (Previously presented) The method of claim 29 wherein the BMP is BMP-2 or BMP-9.

32. (Previously presented) The method of claim 26, further comprising administering protein selected from the TGF- β superfamily of proteins, wherein the protein is capable of inducing the formation of cartilage tissue.

33. (Previously presented) The method of claim 32, wherein said protein is a BMP.

34. (Previously presented) The method of claim 33, wherein the BMP is BMP-2 or BMP-9.

35. (Previously presented) The method of claim 27, further comprising administering a protein selected from the TGF- β superfamily of proteins, wherein the protein is capable of inducing the formation of cartilage tissue.

36. (Previously presented) The method of claim 35, wherein said protein is a BMP.

37. (Previously presented) The method of claim 36, wherein the BMP is BMP-2 or BMP-9.